



Troubleshooting Avaya web.alive®

Release 2.5
Issue 1
March 2011

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Chapter 1: Introduction

Introduction to troubleshooting

This guide provides some tips and recommendations for implementing web.alive in a customer site. This guide provides troubleshooting advice for three groups of people:

- web.alive Installers
- web.alive System Administrators
- web.alive Users

If you still experience problems after following the troubleshooting steps, you can contact the web.alive technical support team by sending an e-mail to support@avayalive.com.

Chapter 2: Installation

Installing the web.alive plug-in

Typically, the installation of the web.alive plug-in is very simple. You visit the web.alive web site, download the installation package, and run it by following the prompts. If you cannot install it, contact your web.alive system administrator. If you cannot download the web.alive installer, the likely cause is one of the following issues:

- web.alive does not support your operating system. At the current time, web.alive supports the most popular versions of Microsoft Windows, which includes XP, Vista, and Windows 7.
- You do not have administrator privileges on your computer. web.alive requires administrator access on your computer. Once it is installed, you do not need administrator access to run it.
- Your security software blocks web.alive. The web.alive installer has to run, install some software, and access the Internet. Some security software may prevent it from doing so. In this situation, you could try to temporarily disable the security software while you install web.alive. Some corporations may also require an authenticating proxy in order to access the Internet. In this situation, you may need to click on an alternative download link and also provide a password.

Potentially corrective actions

- Try pressing the `Shift` key on your keyboard while clicking the **Refresh** button on your browser to restart the Web page.
- If you are using Microsoft Internet Explorer 8 and the browser does not load or crashes, navigate to **Tools > Internet Options > Advanced**. Under the **Security** section, uncheck **Enable Memory protection to mitigate online attacks**. You can recheck this checkbox after you install web.alive.

Chapter 3: Supported hardware and software

VPN support and hardware recommendations

This section contains recommendations for web.alive users. It contains information relating to the optimum connectivity settings for web.alive.

Related topics:

[Supported PCs](#) on page 11

[Supported browsers](#) on page 12

[Hardware recommendations](#) on page 12

Supported PCs

Windows-based PCs with:

- Windows XP SP2, Windows Vista 32/64-bit, or Windows 7 32/64-bit
- Intel GMA 900 (included as part of the Intel 915G Express Chipset series), 1GB RAM, 1.5 GHz GPU
- Broadband network connection
- Speakers and a microphone: A USB stereo headset with microphone is optional but recommended for best voice quality



Note:

web.alive does not support Pocket PCs, such as Windows Mobile devices, due to DirectX limitations.

Supported browsers

- Microsoft Internet Explorer 6, 7, 8
- Mozilla Firefox 3.x
- Google Chrome



Note:

web.alive does not support Opera, Safari, Netscape, SeaMonkey, Camino, and so on.

Hardware recommendations

Avaya recommends using a headset to fully experience the spatial and audiovisual capabilities of web.alive.

More specifically, Avaya recommends the following hardware, in descending order of preference.

1. A USB headset with a boom microphone and headphones, preferably with a volume control and optionally, a mute button on the headset cable
2. An analog headset with RCA headphone and microphone jacks
3. Standalone microphone and speakers
4. Built-in PC microphone and speakers

Chapter 4: Connectivity

Connecting to web.alive

You can connect to web.alive from virtually any location with access to the Internet, such as:

- Any customer site, such as a bank, a telecommunications company, or a government site
- A business partner or channel partner location
- A hotel
- An airport
- Your home
- An Internet café
- Many other sites

Avaya hosts the web.alive Web site externally. You do not need to connect to the Avaya Virtual Private Network (VPN) to access web.alive. You can connect to web.alive from any location in the world. To connect to web.alive, simply open a Web browser and enter the web.alive link that has been provided to you by the web.alive System Administrator. For example, <http://demo.avayalive.com>.

If you are connecting to web.alive from a secure location

If you are connecting to web.alive from a secure network environment, you may require a Secure Socket Layer (SSL) connection. web.alive supports SSL and automatically implements the required settings, when possible. However, there may be situations when a forced SSL tunnel is required. For example, <http://demo.projectchainsaw.com/151/html/index.html?GenericParam=?ForceSSLTunnel=true>.

Potentially corrective actions

This section lists a number of general tips for situations where you cannot connect to web.alive. These recommendations are general issues which apply to many instances of Internet connectivity and are unrelated to web.alive.

Connection failures can be caused by network issues

Confirm that you can connect to internet web sites such as www.google.com.

Connection failures can be caused by firewall or proxy issues

Ensure that any firewall software that you may be running is not blocking connections. web.alive requires: 80/TCP, 1935/TCP, 2379/UDP, 7878/UDP, 9123/TCP, 21002/TCP. If your deployment requires that one or more of these ports is blocked, you must use web.alive in tunneling mode by adding the following text to the end of the web.alive URL: ?

`GenericParam=?ForceTunnelMode=TCPTunnel`. It is a good idea to try tunneling mode even if these ports are not blocked. For tunneling mode to operate successfully, you must open port 80/TCP and port 443/TCP.

If you require a proxy server to connect to the Internet, verify that you have valid proxy settings configured in your browser. You can check your proxy settings and update as follows:

1. Open a browser.
2. Navigate to **Tools > Internet Options > Connections** and click **LAN settings**.
3. Check the information in the **Proxy server** panel and verify that the information is correct. If the information is incorrect, update it.

Alternatively, it is a good idea to turn off all proxy settings and check connectivity.

4. Click **OK** and click **OK** again.





Connection failures can be caused by an incorrect server name

You may be unable to connect because the server is offline or because the server address is wrong. Equally, you may experience issues if the Domain Name Server (DNS) look-up is not functioning correctly. Ensure that the server is running, the server address is correct, and that your computer can resolve the DNS name.

Chapter 5: Voice quality

Voice quality indicator

The bar graph next to the system icon at the bottom of the heads up display (HUD) provides an indication of how external factors are impacting your voice quality. (1)

Number	Voice quality	Voice quality indicator icon
1	System icon	
2	Excellent quality	
3	Fair quality	
4	Poor quality	

The indicator is not always displayed. web.alive only measures voice quality when you are receiving audio from another user.

When voice quality is good, the bar graph indicator is green in color and displays the full set off five bars or rows. (2)

If there are network problems or your computer is extremely busy, the bar graph may display fewer bars. For example, if the wireless signal strength is low, the indicator may display only three bars and it may turn yellow to warn you that the network is not quite good enough to provide perfectly clear voice. (3)

With very bad network conditions, the indicator may display only one or two bars and turn red. In this situation voice quality is typically quite poor and it may even be hard or impossible to understand what is being said. (4)

If network conditions are exceptionally bad, web.alive may disconnect the audio connection between your computer and the web.alive server. If this happens, web.alive attempts to recover the connection. This recovery typically takes a few seconds, and during this time you cannot hear other users and they cannot hear you. If web.alive is unable to recover voice automatically, you may still be able to recover it by right-clicking in the environment and selecting **'My Voice > Reset**.

Changing your audio device

web.alive uses the default operating system selections for audio playback and recording. If you are experiencing issues, it is a good idea to try an alternative device.

The purpose of this task is to change the selections for playback and recording.

Open the **Sounds and Audio Devices Properties** dialog by pressing **F3** or by navigating to **Options** and clicking **Configure Audio**.

Potential situations

Audio problems can take several forms. This section is a list of the possible manifestations of audio issues. If you experience audio issues but do not know the cause, consult this section.

Related topics:

[Other users cannot hear you](#) on page 16



[Other users can hear you, but with poor quality audio](#) on page 23

[You cannot hear other users](#) on page 25

[You can hear other users, but with poor quality audio](#) on page 29

Other users cannot hear you

When you speak into your microphone, do you see activity in the Volume Units (VU) meter that matches your voice, in the lower left of the HUD? If you can see activity, it is likely that the cause of the audio problems is with other user's clients. If you do not see any activity in the VU meter, these instructions should help you to diagnose and/or fix the issue. The VU meter displays the level of audio signal from your microphone. It indicates that web.alive is receiving your voice activity.

Audio strength	VU meter icon
High	
Low	

+ Tip:

Always ensure that you are close to any web.alive users with whom you are attempting to speak. If other users cannot hear you, you can communicate with them using the web.alive chat feature, by pressing the **⌘** key on your keyboard to display the **Chat** dialog.

This section consists of a sequence of escalating checks and steps. After each step, restart web.alive, wait for 30 seconds, fully enter the web.alive environment, and speak into your microphone to identify whether the audio issue is resolved. If the issue is resolved, there is no need to proceed to the following step. The steps range from simple suggestions to more complex solutions, with each row of the table describing an increasingly sophisticated response to the issue.

It is a good idea to print out this page and as you perform each check, you can place a check mark in the row to indicate that you have ruled out that option.

#	Task description	✓
1	Checking if your web.alive status is muted on page 17	
2	Checking if your microphone is physically muted on page 18	
3	Checking your operating system's selected recording device on page 18	
4	Checking if your microphone is muted by the operating system on page 19	
5	Checking if the gain level on your microphone is too low on page 20	
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7	Checking if you have sufficient system resources on page 21	
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10	Checking if there is a physical fault with the microphone on page 22	
11	Checking if there is an internal error in web.alive on page 22	

Checking if your web.alive status is muted

Check if your web.alive status is muted. If the web.alive HUD displays the term **MUTED** at the lower left, other users cannot hear you. When you first enter the environment, web.alive places you on mute until you move around the environment.

1. Click in the environment and wait as the aerial view introduction completes.
2. Press the **m** key on the keyboard to activate and deactivate the mute function.

Checking if your microphone is physically muted

Check if your microphone is muted by way of a physical switch on the device. For example, the switch could be on the microphone's wire or it could be integrated into the headset. Ensure that it is in an un-muted state.

Checking your operating system's selected recording device

It is important to check if the operating system has selected the right type of microphone. Sometimes, the physical microphone that you are using does not match the microphone type that the operating system has selected. At other times, the operating system does not select any microphone. You must ensure that the operating system selects the right microphone. The process of checking on Windows XP is not the same as the process of checking on Windows Vista or Windows 7.

Prerequisites

Before you check whether the operating system has selected the correct microphone, check which operating system is currently running on your computer by navigating to **Start > Settings > Control Panel > System**.

The purpose of this task is to check if the operating system has selected the correct microphone.

- If you are running Windows XP:
 - a. Navigate to **Start > Settings > Control Panel > Sounds and Audio Devices** to display the **Sound and Audio Devices Properties** dialog. Alternatively, press **F3** on the keyboard while in the web.alive environment.
 - b. On the **Voice** tab, click the **Test Hardware** button to initiate a hardware test wizard.
 - c. Click **Next** to begin a hardware test procedure and wait for up to one minute.
 - d. Speak into the microphone. You should see activity on the **Recording Meter**.
 - e. If you do not see any activity, ensure that the sliders are set to maximum and that **Mute** is not selected.
 - f. Speak into the microphone. You should see activity on the **Recording Meter**.
 - g. If you do not see any activity, return to the Voice tab and select a different microphone.
 - h. Repeat the test.
 - i. If you see activity on the **Recording Meter**, close the dialog and close web.alive.

- j. Start web.alive and fully test the microphone.
- If you are running Windows Vista or Windows 7:
 - a. Navigate to **Start > Settings > Control Panel > Sound**. Alternatively, press **F3** on the keyboard while in the web.alive environment.
 - b. Click on the **Recording** tab to display a list of microphones (recording devices) that the operating system recognizes.
 - c. Speak into the microphone. You should see activity on the **Recording Meter** to the right of one of the devices in the list.
 - d. If you see activity, ensure that that recording device is the default device. The default device has a green check mark next to it. You can right-click it and select **Set as Default Device**.
 - e. Close the dialog and close web.alive.
 - f. Start web.alive and fully test the microphone.

Checking if your microphone is muted by the operating system

It is important to check if the operating system has muted your microphone. The process of checking on Windows XP is not the same as the process of checking on Windows Vista or Windows 7.

Prerequisites

Before you check whether the operating system has muted your microphone, check which operating system is currently running on your computer by navigating to **Start > Settings > Control Panel > System**.

The purpose of this task is to check if the operating system has muted your microphone and to unmute it.

- If you are running Windows XP:
 - a. Navigate to **Start > Settings > Control Panel > Sounds and Audio Devices** to display the **Sound and Audio Devices Properties** dialog. Alternatively, press **F3** on the keyboard while in the web.alive environment.
 - b. On the **Audio** tab, select the **Volume** button in the **Sound recording** panel. Alternatively, you can select the **Volume** button in the **Voice recording** panel on the **Voice** tab.
 - c. Ensure that the **Mute** button is not selected and close the dialog.
- If you are running Windows Vista or Windows 7:
 - a. Navigate to **Start > Settings > Control Panel > Sound**. Alternatively, press **F3** on the keyboard while in the web.alive environment.
 - b. On the **Recording** tab, right-click on the default device and select **Properties**.

- c. Select the **Levels** tab on the **Microphone Properties** dialog and ensure that the button to the right of the microphone level does not have a red mute symbol in it.
- d. Click **Ok** or **Apply** and verify that when you speak, the green activity segments light up in the audio level meter to the right of the default device. Click **Ok** again to close the dialog.

Checking if the gain level on your microphone is too low

It is important to check if the gain level on your microphone, as configured in the operating system, is too low. The gain level is often called the microphone volume level. The process of checking on Windows XP is not the same as the process of checking on Windows Vista or Windows 7.

Prerequisites

Before you check the gain level, check which operating system is currently running on your computer by navigating to **Start > Settings > Control Panel > System**.

The purpose of this task is to check the gain level on your microphone and to raise it if necessary.

- If you are running Windows XP:
 - a. Navigate to **Start > Settings > Control Panel > Sounds and Audio Devices** to display the **Sound and Audio Devices Properties** dialog. Alternatively, press **F3** on the keyboard while in the web.alive environment.
 - b. On the **Audio** tab, select the **Volume** button in the **Sound recording** panel. Alternatively, you can select the **Volume** button in the **Voice recording** panel on the **Voice** tab.
 - c. Ensure that the volume sliders are set to their maximum level and close the dialog.
- If you are running Windows Vista or Windows 7:
 - a. Navigate to **Start > Settings > Control Panel > Sound**. Alternatively, press **F3** on the keyboard while in the web.alive environment.
 - b. On the **Recording** tab, right-click on the default device and select **Properties**.
 - c. Select the **Levels** tab on the **Microphone Properties** dialog and ensure that the volume sliders are set to their maximum level.
 - d. Click **Ok** or **Apply** and verify that when you speak, the green activity segments light up in the audio level meter to the right of the default device. Click **Ok** again to close the dialog.

Checking that your microphone is correctly connected

Your microphone may not be properly connected to your computer. This is particularly the case if your microphone is a non-USB microphone. Typically, your microphone should plug into a

pink connector receptacle on a desktop PC and into a connector denoted by a small microphone icon on a laptop PC.

Checking if you have sufficient system resources

web.alive requires at least 1 Gigabyte of RAM, 1 Gigabyte of free disk space, 2 Gigabytes of swap space, and a CPU with a clock speed of 1.5 Gigahertz or higher. If you are using Windows Vista or Windows 7, Avaya recommends at least 2 Gigabytes of RAM. If the available resources on your machine are below these amounts, you may experience audio issues. If your computer is running close to these limits, there are a number of steps that you can take.

- Close all unnecessary browser windows and other applications, including applications which run automatically at start-up time, such as instant messaging applications and anti-virus software. You can often control these applications using the small icons on the lower right of the task bar.
- Set your computer's power scheme to **Maximum Performance**. **Maximum Performance** is also known as **Minimal Power Management, Presentation, High Performance**, and so on. To set the power scheme to **Maximum Performance**, navigate to **Start > Settings > Control Panel > Power Options**. On the **Power Schemes** tab, from the **Power Schemes** drop-down list, select **Maximum Performance** and click **OK**.
- If you are using Windows Vista or Windows 7, you can switch to a secondary, lighter, voice engine. This secondary engine requires less resources. However, you should only consider this option after you try the other options, above. To switch to the secondary engine, enter the web.alive environment, right-click your mouse and select **My Voice > Secondary Voice Engine**.

There are a number of limitations associated with the secondary voice engine. The overall quality of the audio is reduced. There is no voice quality meter. There is no automatic echo cancellation. If you are using a laptop, Avaya recommends using a headset. If you do not have a headset, ensure that you mute yourself in web.alive. When you wish to talk to other users, hold down the **M** key and release it when you are finished.

Checking if your computer has the correct audio driver

If you have an incorrect, mismatched, or out-of-date audio driver, web.alive may not function correctly. Ensure that your computer is running the latest audio driver software and that it correctly corresponds with the computer's audio card/chipset.

-
1. Locate the vendor/manufacturer name and model number for your computer.
 2. Locate the latest audio driver software for that model on the vendor Web site or search the Internet to find the latest audio driver software.

3. Download and install the latest audio driver software.
 4. Restart your computer.
-

Checking if any other software programs are blocking the sound

Certain software programs can block communication between the web.alive client and the web.alive server.

- Ensure that any firewall software that you may be running is not blocking connections. web.alive requires: 80/TCP, 1935/TCP, 2379/UDP, 7878/UDP, 9123/TCP, 21002/TCP. If your deployment requires that one or more of these ports is blocked, you must use web.alive in tunneling mode by adding the following text to the end of the web.alive URL: `?GenericParam=?ForceTunnelMode=TCPTunnel`. It is a good idea to try tunneling mode even if these ports are not blocked. For tunneling mode to operate successfully, you must open port 80/TCP and port 443/TCP.
- Ensure that the `dwtvc.exe` process can run. Sometimes, anti-virus software can prevent this process from running.

Checking if there is a physical fault with the microphone

It is important to check if there is a physical fault with the microphone or with the connection between the microphone and the computer.

A physical fault could take the form of a break in the wires between your microphone/headset and your computer. If your microphone/headset is wireless, there may be a lack of connectivity to your computer. Alternatively, the microphone itself may be faulty. Avaya recommends trying a different microphone, particularly one that has operated successfully in the past.

Checking if there is an internal error in web.alive

It is important to check if there is an internal error in web.alive.

1. Shut down all instances of your the Web browser that you have been using with web.alive and wait for 30 seconds.
2. Press `ALT + CTRL +DEL` to display the **Windows Task Manager**. In the **Processes** tab, ensure that the process `dwtvc.exe` is not running. If it is running, stop it.

3. Restart web.alive, wait for 30 seconds, fully enter the web.alive environment, and speak into your microphone to identify whether the audio issue is resolved.
4. If the microphone is still not operating, restart your computer.

Other users can hear you, but with poor quality audio

This section consists of a sequence of escalating checks and steps. After each step, restart web.alive, wait for 30 seconds, fully enter the web.alive environment, and speak into your microphone to identify whether the audio issue is resolved. If the issue is resolved, there is no need to proceed to the following step. The steps range from simple suggestions to more complex solutions, with each row of the table describing an increasingly sophisticated response to the issue.

It is a good idea to print out this page and as you perform each check, you can place a check mark in the row to indicate that you have ruled out that option.

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2	Checking if you have sufficient system resources on page 21	
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8	Checking for a faulty jack on page 25	

Checking network conditions

Poor network conditions between the web.alive client and the web.alive server, can impact the quality of voice. This impact can range from a slight degradation to complete unintelligibility. When the quality of voice is impacted, the VU meter on the web.alive display displays in yellow or red. In addition, web.alive may display voice quality warnings in the HUD.

Avaya recommends the following areas for investigation:

- web.alive requires an Internet connection that provides at least one megabit per second of download speed and 256 kilobits per second of upload speed. If your Internet

connection is slower than this, it is likely that you will encounter issues with voice quality.

- If there are proxy servers, tunnels, or virtual private networks (VPNs) between the web.alive client and the web.alive server, you may experience poor voice quality. If you have the option of connecting directly, without these intervening servers, you should try the direct connection.
- Some wireless networks have network characteristics below the minimum requirements for web.alive. If you have the option of using a wired connection, you should try the wired connection.

Checking if there is a physical fault

It is possible that there may be a physical fault with your microphone or with the connection of your microphone to your computer. Such faults can introduce an element of static interference or intermittent sound.

A physical fault can take the following forms:

- A break in the wire(s) between your microphone and computer.
- If you are using a wireless microphone, it is possible that there may be an issue with intermittent lack of connectivity between the device and your computer.
- The microphone itself could have a physical fault.

Checking if there is interference from other devices

Sometimes, other devices nearby may cause electromagnetic interference with the microphone signal. These devices can be audio and non-audio. For example:

- Cellular phones
- Cordless phones
- Microwave ovens
- Other nearby wireless headsets

Avaya recommends moving away from any possible sources of interference. Alternatively, switch off the devices.

Checking the cable on the device

Sometimes, the cable associated with the microphone or speaker gets tangled with the other wires.

Check if your microphone, speaker, or headset cable is passing too closely or is wrapped around another cable, such as a power cable. The other cable may be inducing noise. Try to unwrap or move the cable to rule out this issue.

Checking for a faulty jack

Check if your microphone, speaker, or headset cable is plugged into a jack or plug on your computer with electrical interference. Try to use a different jack to rule out this issue.

You cannot hear other users

Note:

If you can hear all other users, with the exception of one user, you should direct that user to the checks in [Other users can hear you, but with poor quality audio](#) on page 23

This section consists of a sequence of escalating checks and steps. After each step, restart web.alive, wait for 30 seconds, fully enter the web.alive environment, and listen for audio from other users from your speakers to identify whether the audio issue is resolved. If the issue is resolved, there is no need to proceed to the following step. The steps range from simple suggestions to more complex solutions, with each row of the table describing an increasingly sophisticated response to the issue.

It is a good idea to print out this page and as you perform each check, you can place a check mark in the row to indicate that you have ruled out that option.

#	Task description	<input checked="" type="checkbox"/>
1	Checking if the speaker volume level is too low on page 26	<input type="checkbox"/>
2	Checking the physical speaker volume level on page 26	<input type="checkbox"/>
3	Checking if your speakers are muted by the operating system on page 27	<input type="checkbox"/>
4	Checking if your speakers are physically muted on page 27	<input type="checkbox"/>
5	Checking the operating system selection on page 28	<input type="checkbox"/>
6	Checking if your speakers are correctly connected on page 29	<input type="checkbox"/>
7	Checking if you have sufficient system resources on page 21	<input type="checkbox"/>
8	Checking if your computer has the correct audio driver on page 21	<input type="checkbox"/>
9	Checking if any other software programs are blocking the sound on page 22	<input type="checkbox"/>
10	Checking if there is a physical fault with the speaker on page 29	<input type="checkbox"/>
11	Checking if there is an internal error in web.alive on page 22	<input type="checkbox"/>

Checking if the speaker volume level is too low

If the speaker software volume level is too low, you cannot hear other users in the web.alive environment.

Prerequisites

Before you check whether the operating system has muted your microphone, check which operating system is currently running on your computer by navigating to **Start > Settings > Control Panel > System**.

The purpose of this task is to check if the speaker volume level is too low and to raise it if necessary.

- If you are running Windows XP:
 - a. Navigate to **Start > Settings > Control Panel > Sounds and Audio Devices** to display the **Sound and Audio Devices Properties** dialog. Alternatively, press **F3** on the keyboard while in the web.alive environment.
 - b. On the **Audio** tab, select the **Volume** button in the **Sound playback** panel. Alternatively, you can select the **Volume** button in the **Voice playback** panel on the **Voice** tab.
 - c. Ensure that all relevant volume sliders are set to their maximum values and close the dialog.
- If you are running Windows Vista or Windows 7:
 - a. Navigate to **Start > Settings > Control Panel > Sound**. Alternatively, press **F3** on the keyboard while in the web.alive environment.
 - b. On the **Playback** tab, right-click on the default device and select **Properties**.
 - c. Select the **Levels** tab on the **Speaker Properties** dialog and ensure that all relevant volume sliders are set to their maximum values.
 - d. Click **Ok** or **Apply** and verify that when you play a sound, you hear that sound. Click **Ok** again to close the dialog.

Checking the physical speaker volume level

It is possible that the speakers are hard-muted by way of a physical switch.

- In the case of external speakers, look for a volume control on the speakers themselves.
- In the case of built-in laptop speakers, look for a thumb-wheel volume control or volume control buttons.
- In the case of a headset, look for a volume control somewhere along the headset's wire.

In all cases, ensure that you set the volume to the maximum setting.

Checking if your speakers are muted by the operating system

It is important to check if the operating system has muted your speakers. The process of checking on Windows XP is not the same as the process of checking on Windows Vista or Windows 7.

Prerequisites

Before you check whether the operating system has muted your microphone, check which operating system is currently running on your computer by navigating to **Start > Settings > Control Panel > System**.

The purpose of this task is to check if the operating system has muted your speakers and to unmute them.

- If you are running Windows XP:
 - a. Navigate to **Start > Settings > Control Panel > Sounds and Audio Devices** to display the **Sound and Audio Devices Properties** dialog. Alternatively, press **F3** on the keyboard while in the web.alive environment.
 - b. On the **Audio** tab, select the **Volume** button in the **Sound playback** panel. Alternatively, you can select the **Volume** button in the **Voice playback** panel on the **Voice** tab.
 - c. Ensure that the **Mute All** button is not selected and close the dialog.
- If you are running Windows Vista or Windows 7:
 - a. Navigate to **Start > Settings > Control Panel > Sound**. Alternatively, press **F3** on the keyboard while in the web.alive environment.
 - b. On the **Playback** tab, right-click on the default device and select **Properties**.
 - c. Select the **Levels** tab on the **Speaker Properties** dialog and ensure that the button to the right of the sound playback level does not have a red mute symbol in it.
 - d. Click **Ok** or **Apply** and verify that when you speak, the green activity segments light up in the audio level meter to the right of the default device. Click **Ok** again to close the dialog.

Checking if your speakers are physically muted

Check if your speakers are muted by way of a physical switch on the actual speakers or on the keyboard. Ensure that these controls are in an un-muted state.

Checking the operating system selection

It is important to check if the operating system has selected the right type of speakers. Sometimes, the physical speakers that you are using do not match the speaker type that the operating system has selected. At other times, the operating system does not select any speakers. You must ensure that the operating system selects the right speaker. The process of checking on Windows XP is not the same as the process of checking on Windows Vista or Windows 7.

Prerequisites

Before you check whether the operating system has selected the correct speaker device, check which operating system is currently running on your computer by navigating to **Start > Settings > Control Panel > System**.

The purpose of this task is to check if the operating system has selected the correct speaker.

- If you are running Windows XP:
 - a. Navigate to **Start > Settings > Control Panel > Sounds and Audio Devices** to display the **Sound and Audio Devices Properties** dialog. Alternatively, press **F3** on the keyboard while in the web.alive environment.
 - b. On the **Voice** tab, in the **Voice playback** panel, click the **Volume** button.
 - c. Move the volume control. You should hear a tone each time you move it.
 - d. Ensure that the volume control is near the top of the range.
 - e. If you do not see any activity, return to the **Voice** tab and select a different speaker from the **Default device** drop-down list.
 - f. Repeat the test until you select a device that produces a tone.
 - g. Close the dialog and close web.alive.
 - h. Start web.alive and fully test the speakers.
- If you are running Windows Vista or Windows 7:
 - a. Navigate to **Start > Settings > Control Panel > Sound**. Alternatively, press **F3** on the keyboard while in the web.alive environment.
 - b. Click on the **Playback** tab to display a list of speakers (playback devices) that the operating system recognizes.
 - c. Right-click each device and click **Test**. You should hear a tone coming from the speakers or the headset.
 - d. Repeat the test until you select a device that produces a tone and select it as **Set as Default Device**.
 - e. Close the dialog and close web.alive.

- f. Start web.alive and fully test the speakers.

Checking if your speakers are correctly connected

Your speakers may not be properly connected to your computer. Typically, your microphone should plug into a green connector receptacle on a desktop PC and into a connector denoted by a small microphone icon on a laptop PC. USB speakers plug into the USB jack on your computer.

Checking if there is a physical fault with the speaker

It is important to check if there is a physical fault with the speaker or with the connection between the speaker and the computer. A physical fault could take the form of a break in the wires between your speaker/headset and your computer. If your speaker/headset is wireless, there may be a lack of connectivity to your computer. Alternatively, the speaker itself may be faulty. Avaya recommends trying a different set of speakers, particularly a set that has operated successfully in the past.

You can hear other users, but with poor quality audio

Note:

If you can hear all other users, with the exception of one user, you should direct that user to the checks in [Other users can hear you, but with poor quality audio](#) on page 23

This section consists of a sequence of escalating checks and steps. After each step, restart web.alive, wait for 30 seconds, fully enter the web.alive environment, and listen for audio from other users from your speakers to identify whether the audio issue is resolved. If the issue is resolved, there is no need to proceed to the following step. The steps range from simple suggestions to more complex solutions, with each row of the table describing an increasingly sophisticated response to the issue.

It is a good idea to print out this page and as you perform each check, you can place a check mark in the row to indicate that you have ruled out that option.

#	Task description	<input checked="" type="checkbox"/>
1	Checking network conditions on page 23	<input type="checkbox"/>
2	Checking if you have sufficient system resources on page 21	<input type="checkbox"/>
3	Checking if there is a physical fault with the speaker on page 29	<input type="checkbox"/>
4	Checking if your computer has the correct audio driver on page 21	<input type="checkbox"/>
5	Checking if there is interference from other devices on page 24	<input type="checkbox"/>

6	Checking the cable on the device on page 24	
7	Checking for a faulty jack on page 25	

Potential causes

If you are experiencing voice quality or audio problems, the cause may be one of a number of issues. This section is a list of possible causes. If you suspect that you may know the cause of your audio issues, consult this section.

Related topics:

[For network issues](#) on page 30

[For issues with echo](#) on page 31

[For background noise](#) on page 32

[For Central Processing Unit \(CPU\) contention issues](#) on page 32

For network issues

If network conditions are impacting your voice quality, there are a number of potentially helpful measures that you can take.

If you are using a wireless network

If you are using a wireless network you can try to boost the signal strength and voice quality by moving your computer.

- Move your computer closer to the wireless access point, such as, your router.
- Move your computer away from sources of interference such as cordless phones and microwaves.

Some wireless routers do not support the 802.11 power saving mode and may drop packets when the laptop is in power saving mode, causing poor voice quality. Typically, if you adjust your power settings to their maximum performance, the issue no longer occurs. For more details on the problem and how to fix it, see <http://support.microsoft.com/kb/928152>.

If these tips do not help, it is a good idea to consider upgrading to a newer wireless technology, such as an upgrade from 802.11b to 802.11g or from 802.11g to 802.11n. Alternatively, plug directly into an Ethernet jack.

If you are using a virtual private network (VPN)

VPNs slow down voice traffic and can consume central processing unit (CPU) resources on your computer. If possible, try to disconnect from the VPN. and then attempt to reconnect to web.alive.

If you suspect firewall or proxy issues

web.alive automatically detects firewalls and proxies and tunnels through them as required. However, tunneling through a firewall and/or a proxy server adds network overhead which can impact voice quality. If possible, avoid using a proxy server and contact your network administrator to ensure that the required ports are free.

Ensure that any firewall software that you may be running is not blocking connections. web.alive requires: 80/TCP, 1935/TCP, 2379/UDP, 7878/UDP, 9123/TCP, 21002/TCP. If your deployment requires that one or more of these ports is blocked, you must use web.alive in tunneling mode by adding the following text to the end of the web.alive URL: ?

`GenericParam=?ForceTunnelMode=TCPTunnel`. It is a good idea to try tunneling mode even if these ports are not blocked. For tunneling mode to operate successfully, you must open port 80/TCP and port 443/TCP.

If there are other applications currently using the network

web.alive shares network bandwidth with all of the other applications on your computer and with other applications running on other computers on the same network. If other applications are using a lot of network bandwidth, this may impact voice quality. If possible, stop or pause those other applications until your web.alive conversations have concluded. Peer-to-peer networking applications and uploading/e-mailing large files are frequently the source of network load.

For issues with echo

web.alive has built-in echo detection and reduction software which attempts to reduce echoes. You can improve the performance of echo reduction by trying to find a quiet spot.

Typically, you only notice issues with echo when another caller is generating an echo. You rarely notice issues when you are generating the echo. Usually, other callers inform you if they suspect that you are the origin of the echo.

Your microphone may be picking up noise from your speakers. If you use speakers, keep the volume as low as possible. Use a headset or headphones if possible. Ensure that the other callers are also using a headset. The microphones attached to Web cameras can be particularly troublesome because they are highly sensitive and detect background noise and echoes more easily.

Note:

If web.alive mutes your telephone line due to echo issues, you can speak by holding down the **M** key. If you release the **M** key, web.alive mutes you again.

For background noise

web.alive has built-in noise reduction software which attempts to reduce the amount of background noise.

Additionally, Avaya recommends the following:

- Try to find a quiet location.
- Use a USB headset. Built-in microphones in computers and Web cameras typically pick up a lot of background noise. Analog headsets and the built-in audio hardware in computers can also be subject to electronic noise generated by your computer.
- Move the microphone closer to your mouth and away from noise sources, such as a computer fan.

For Central Processing Unit (CPU) contention issues

web.alive gives priority to voice communications and so other applications do not normally impact voice quality. However, if other video conferencing or chat applications are currently running, they may impact the web.alive voice quality. If possible, pause or stop the other applications until your web.alive conversations have concluded.

Chapter 6: Desktop sharing and graphics

Desktop sharing

To share your desktop, your computer requires Java.

To view a shared desktop, your computer requires a supported version of the Adobe Flash player, such as any version greater than 10.1.54.

Graphics

web.alive requires accelerated Direct 3D (DirectX) graphics. Virtually all personal computers, manufactured within the past five years, can run web.alive with no difficulties. However, older computers with Intel Extreme 3D may not run web.alive. Computers with discrete graphics with 32 MB or less of video memory may also have problems running web.alive.

Additionally, if your computer displays a message which states that Direct 3D is not supported on your computer, this may be as a result of attempting to connect to web.alive by way of a virtual machine or remote desktop software. Many virtual machines and remote desktop software applications do not support 3D graphics. If you have this type of configuration, you may be able to turn on support for 3D graphics. However, for best results, run web.alive natively on your computer.

If your computer experiences low performance or graphical glitches, this may be as a result of having out-of-date graphics drivers. To overcome these issues, you can download the latest graphics drivers. To locate the latest graphics drivers, visit:

- <http://www.intel.com>
- <http://www.nvidia.com>
- <http://www.amd.com>

...or your PC manufacturer's Web site.

Chapter 7: Uploading slides

Possible issues

Some of these issues only occur in rare circumstances and are generally related to the Microsoft PowerPoint™ processes that occur in the background.

It is important to note that this feature operates successfully only if the client machine has PowerPoint. Meeting attendees who do not have PowerPoint on their computers cannot see any uploaded PowerPoint slides. web.alive uses the PowerPoint on the client machine to interpret the slides.

Alternatively, you can convert the PowerPoint slides (.PPT) to a Portable Document Format (PDF) and upload the .pdf file. This is a useful general workaround. When you upload PowerPoint slides, you use an external process. When you upload a .pdf file, you do not use an external process so it is considered more reliable. If you are running Microsoft Office 2007, you can download a simple plug-in, which enables you to save files as pdfs, here: <http://www.microsoft.com/downloads/en/details.aspx?FamilyId=F1FC413C-6D89-4F15-991B-63B07BA5F2E5&displaylang=en>

If you experience any one of the following issues:

- If your computer displays a PowerPoint window during an upload
- If PowerPoint uploads more slides than in the slide deck
- If a PowerPoint upload fails but a Portable Document Format (.pdf) upload succeeds

...follow these steps:

1. Press **ALT+CTRL+DELETE** and click **Task Manager**.
2. View the **Processes** tab.
3. Select any item called **POWERPNT.EXE** and click **End Process**.
4. Repeat the slide upload.

Uploading slides

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